

WHAT IS CLAIMED IS:

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1. ~~Apparatus for the measurement of fruit particles comprising:  
a substantially opaque cabinet;  
a camera in the upper portion of said cabinet;  
a light source in said cabinet;  
a sample tray; and  
a computer with image analyzing software.~~
2. The apparatus of claim 1 wherein said light source comprises a light box in the lower portion of said cabinet.
3. The apparatus of claim 1 wherein said light source comprises an incident light source within said cabinet.
4. The apparatus of claim 1 wherein the light source comprises switches for adjusting the intensity of the light.
5. The apparatus of claim 1 wherein the light source comprises multiple, independently-adjustable, light-producing sources.

6. The apparatus of claim 1 wherein the inside of the cabinet is non-reflecting.

7. The apparatus of claim 1 wherein said sample tray comprises a light-transmitting bottom.

8. The apparatus of claim 2 wherein said apparatus further comprises a light box cover.

9. The apparatus of claim 8 wherein said apparatus further comprises a sample tray guide.

10. Apparatus for the measurement of fruit particles comprising:

a substantially opaque cabinet with a non-reflecting inside surface;

a camera in the upper portion of said cabinet;

a light box with light intensity adjusting switches;

an incident light source;

a sample tray with a light-transmitting bottom; and

a computer with image analyzing software.

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11. A process for the measurement of fruit particles comprising:

placing fruit particles in a sample tray;

illuminating said fruit particles so that an image may be obtained in which the fruit particles are distinguishable from the background;

capturing a computer-readable image of at least a portion of said illuminated fruit particles;

using a computer and an image analyzing software program to analyze said image and obtain information concerning said fruit particles.

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